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Impacts of China's Entry into the WTO on

Guangdong's Forestry and Its Strategies

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Report Highlights:

To take advantage of China's entry into the WTO, Guangdong will implement an import-substitution strategy and an export-oriented strategy to restructure its forestry sector. Wood pulp papermaking, forest chemicals, forest by-products, and forest tourism will be among its developmental emphases.

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The Guangdong's People's Government has published a series of articles in Chinese on "Guangdong's Agriculture and the WTO." This report is an edited translation of an article on the impact of China's entry to the WTO on the forestry of the Guangdong Province and what the Province will do to face the increased competition from imports. It provides some clues on the future direction of China's forestry in the South. To take advantage of China's entry into the WTO, Guangdong will implement an import-substitution strategy and an export-oriented strategy to restructure its forestry sector. Wood pulp papermaking, forest chemicals, forest by-products, and forest tourism will be among its developmental emphases.

China's entry into the WTO will bring profound and severe impact on the development of Guangdong's forestry. Guangdong will study the basic rules and functions of the World Trade Organization, analyze the actual situation of Guangdong's forestry, find out the ways of utilizing the opportunities and seek for the measures to overcome the challenges. The advantages of the Guangdong Province will be applied to adjusting the manufacturing structure, optimizing resource allocation, improving the competitiveness of its products, and enabling it to participate in international market competition.

I. After China enters the WTO, Guangdong's forestry will face numerous challenges.

Forestry is an industry restricted by the natural resources. The stock and the natural endowment of forest resources have an important impact on Guangdong's capability of participating in the international market competition. After China's entry into the WTO, the challenges for Guangdong's forestry will mainly be shown in the following aspects:

A. Because the stock and per capita share of Guangdong's forest resources are limited, it cannot profit from international competition.

1. Guangdong is short of cutting trees because the current stock and the per capita share of forest resources are limited. According to statistics, there are 9.195 million hectares of forest area in the Guangdong Province, accounting for 6.88% of the national forest area. The per capita forest area is 0.13 square hectare. The forest stock of the whole province is 29.9 billion cubic meters, accounting for 2.54% of the national forest stock.

The forest resources of Guangdong are not evenly distributed or reasonably structured. The available cutting trees are in relatively small quantity. Middle-aged and young trees account for 74.2% of the total stock. Almost mature, mature, and over mature trees account for 25.8% and are mainly distributed in remote districts and the upper and middle reaches of the major rivers. The remote locations increase the difficulty of woodcutting. And quite a few of these trees are for water conservation and prohibited from cutting.

2. The inferior quality of forest resources lowers the productivity of lumbers. Though the area and stock of forest in the Guangdong Province both increased in recent years, the average stock of a standing forest is only 35 cubic meters per hectare, accounting for 46.05% of the national average.
3. In the Guangdong Province, the production of lumbers and the supply of raw materials

for the forest industry had decreased.

Table 1: Planned Lumber Production in the Guangdong Province

	Unit: '000 CBM			
	1995	1996	1997	1998
Total	306.71	266.08	261.68	252.65
Log	275.35	242.67	241.38	233.72
Firewood	31.34	23.41	20.30	18.93

B. The forest industry is facing severe test and the prospect is not optimistic.

1. Small in size and low in overall quality, the forest industries' competitiveness in the international market is impaired. In the Guangdong Province, the size of the forest industries is small and the overall quality is low. The single-product manufacturing of synthetic boards cannot meet the market needs. Though synthetic boards had developed fast and increased in production in recent years, there are few high-grade products. Compared with international standards, Guangdong has a long way to go in terms of variety, specification, quality, or functions.

The plywood industry will face the biggest challenge. Plywood is extensively used in construction, furniture, packaging, automobile and ships because of its special form. However, because the quantity and quality of the raw materials for plywood within the province and nationwide had decreased rapidly, the cost of plywood production had increased and the quality of finished plywood products has dropped. Some local products are stagnant in storage while foreign products are imported in large quantity to meet the market demands. Some plywood manufacturing factories are unable to compete with imported plywood because they are small-sized, inefficient and low in technical level. After China's entry into the WTO, the situation will become more severe. Therefore, it is not only necessary, but also urgent, to adjust the industrial structure of forestry in the Guangdong Province.

Table 2: Comparison of Average Size of
the Forest Industrial Enterprises in the Guangdong Province

	World	China	Guangzhou	Guangzhou/ The World	Guangzhou/ China
Wood Pulp (T)	12,000	2,758			
Flakeboard (CBM)	5,000	6,490	9,576	19 %	147.5
Fiberboard (CBM)	5,000	3,728	3,000	6 %	80.5
Medium fiberboard (CBM)	100,000	26,700	35,436	35 %	132.7
Plywood (CBM)	10,000	3,342	11,833		354

Based on 1998 statistics.

Table 3: Comparison of Average Size between Enterprises
in the Guangdong Province and Europe

	(in 10 thousand units)		
	Europe	Guangdong	Guangdong/
Wood Pulp (T)	10.4		
Flakeboard (CBM)	11.1	0.9576	8.62 %
Fiberboard (CBM)	7.0	0.3	4.28 %
medium fiberboard (CBM)	30.91	3.5436	11.64 %
Plywood (CBM)	1	1.1833	

2. The labor productivity of the forest industry is on the low side.

Table 4: Comparison of Per Capita Labor Productivity
between the Guangdong Province and the Developed Countries
(in CBM/Person-Year)

	Developed Countries*	China	Guangdong	Guangdong/ Developed Countries	Guangdong/ China
Plywood	60-75	8.2	35	58-46 %	426 %
Flakeboard	1,417	5.7	106	7 %	1,859 %
Medium Fiberboard	400	82.64	180	45 %	217 %

* For plywood, the developed country is Indonesia; for flakeboard, the developed countries are the United States, Japan and Germany, and the productivity level is the average of these countries; for medium fiberboard, the developed countries refer to Europe and North American countries.

The per capita labor productivity of the forest industry in the Guangdong Province is far behind that of the developed countries and is less efficient in structure. Although manpower is cheap in the Guangdong Province, this advantage of human resource is partially or totally counteracted by low productivity.

3. Except for the imported production lines of flakeboard and fiberboard, the other technologies of forest industry, especially those of the plywood manufacturing and forest chemical industry, are backward, costly, and inferior in quality.

Primary processing products are predominant in wood products. Wood chips and finished wood products account for one-half or more of all the wood products in the Guangdong Province. There is no new wood pulp papermaking factory other than the Guangzhou Paper Factory. This situation persists regardless of the natural conditions. It illustrates the urgency and necessity of adjusting the industrial structure for forestry in the Guangdong Province. Under the prevailing circumstances, some of the forest industrial enterprises will be eliminated in international market competition.

C. For the trade of forest products in the Guangdong Province, opportunities and challenges both exist. The overall advantages are more than the disadvantages.

China is a big wood producing and consuming nation in the world and Guangdong is a big wood consuming and importing province in China. As wood is closely related to the forestry industry, agriculture and the people's life, it plays an important role in the development of the national economy and the social enterprises. Along with the development of the national economy and the social enterprises and the elevation of the people's living standards, the needs for wood products show an upward trend. However, because of the projects for protecting natural resources launched by China and the limited number of cutting trees and other reasons, China will have to rely on imported wood to balance the supply and the demand of wood for a long time in the future. China's entry into the WTO will benefit the import of wood and bring export opportunities to rosin and other down-stream processing products, wood chips, furniture and other wood products. It will propel the development of an export-oriented forestry economy in Guangdong and bring challenges to forest resources management.

1. China's tariff for forest products has been reduced to the level of a developing country enabling it to join the WTO. This creates a perfect environment for the import of wood. In order to join the WTO, China had reduced its tariff drastically in 1996, 1997 and 1999. The overall tariff has been reduced from 36.9% to 17%. China is going to reduce its tariff again next year to below 15%. By 2005, the tariff will be reduced to below 10%.

Meanwhile, the tariff for logs and sawlogs has been reduced from about 15% to 5% and then to zero. The tariff for plywood has been reduced from 22% to 15%. The tariff for flakeboard and fiberboard has been reduced from 22% to 18%. The tariff for veneer has been reduced from 12% to 5%. Each reduction of tariff causes a number of enterprises within the Guangdong Province and China to suffer a loss in returns or to stop operation entirely. The reduction of tariff has strengthened the international cooperation on forestry economy, expedite global optimization of resource allocation, push price competition and boost up the development of external structure.

2. In the Guangdong Province, the import volume of wood increased every year, but this increase did not have too much impact on the wood market in the forest zones. The wood consumption of the Guangdong Province has risen from 1.8877 million cubic meters before China's economic reform and opening up to the outside world, to 8.7656 million cubic meters in 1998. Along with the development of the economy and the elevation of the people's living standards, the estimated usage of wood will exceed 10 million cubic meters in the 21st Century. As the number of cutting trees is limited in the Province, wood import is needed to balance supply and demand.

The total import volume of wood in the Guangdong Province from 1995 to 1998 was 99.2759 million cubic meters, accounting for 53.56% of the total import volume in China, and 913.2% of the wood production in the Guangdong Province. From January to September, 1999, the amount of imported logs and sawlogs in the Guangdong Province was 2.7895 million cubic meters, an increase of 78.17% over the same period in 1998, and 161.75% more than the production of logs in the Guangdong Province in the same period in 1999. The supply was less than the demand and prices rose slightly.

Table 5: Import of Wood in China and in the Guangdong Province
Unit: '000 CBM

	1995		1996	
	China	Guangdong	China	Guangdong
Total	32,878.2	19,057.9	44,916.3	2,565.21
Log	2,583	676.8	3,186	687.9
Sawlog	1,215.7	1,142.9	1,332.8	1,206
Synthetic board	5,207.5	1,884	4,442.5	1,515
Wood pulp	3,690	622.7	12,780	1,434.7
Paper, cardboard, Advertising board	16,137	14,731.5	23,175	20,808.5
	1997		1998	
	China	Guangdong	China	Guangdong
Total	51,432.4	30,805.9	56,160.8	23,760
Log	4,471	923.3	4,823	920
Sawlog	1,892.9	1,352.1	2,414.3	1,370
Synthetic board	3,278.5	1,480	4,427.5	2,300
Wood pulp	13,464	1,240.9	18,513	1,080
Paper, cardboard, advertising board	27,882	25,809.6	25,983	18,090

Notes: 1 CBM of sawlog = 1.428 CBM of log, 1 CBM of plywood = 2.5 CBM of log, 1 CBM of flakeboard and medium fiberboard = 1.7 CBM of log, 1 ton of paper, cardboard and wood pulp = 4.5 CBM of log, 1 ton of waste paper = 3.4 CBM of log. Synthetic board includes flakeboard, plywood, fiberboard, and veneer.

3. The export of some forest products will be adversely affected, but the export of rosin, wood chips, furniture and their by-products will have an edge.

Guangdong's forestry will face severe challenges after China enters the WTO. The advantages will be shown in the new industries such as furniture making. The increased availability of imported wood, the reduction of production cost and the increase of the furniture export will further stimulate the growth of the furniture industry.

Table 6: Export of Forest Products in the Guangdong Province

	Unit: '000 US\$			
	1995	1996	1997	1998
Total	1,172,670	1,553,530	1,975,970	2,118,850
Rosin	63,950	58,430	79,230	42,910
Wood and wooden products	225,760	343,380	446,020	408,850
Furniture	723,430	816,520	1,128,710	1,301,060
Bamboo byproducts	89,760	278,020	251,480	269,750
Paper, cardboard and wood pulp	69,770	57,180	60,530	96,280

- II. Guangdong's forestry will get unprecedented opportunities after China enters the WTO.
- A. China's entry into the WTO will link up China and the world. Drawing Guangdong and the world closely together will help the implementation of the export-oriented strategy,

enabling Guangdong to participate in international market competition, to divide its work according to a common criterion, and to globalize Guangdong's economy. The developing scope and opportunities for forestry will be broadened and enriched. Compared with other provinces in China, the Guangdong Province will have more opportunities for development because of its advantageous location and climate.

- B. Help form famous brands of forest products and maximize the advantages of Guangdong's forestry. China is a developing country with a large population and a vast and cheap labor force. Thus, the forest products in the Guangdong Province have obvious advantages in the labor-intensive industries. The products that can best capture this advantage are rosin, wood chips, furniture, bamboo and wooden products and other forest byproducts such as tea, mushroom, bamboo shoots and so on.

Though some other forest products, like log, synthetic board, paper pulp and paper products, have no comparative advantage in world competition, they have extensive opportunities for development after China's entry into the WTO. For example, the adjustment of industrial structure will create good opportunities for developing the wood pulp papermaking industry. In addition, the natural resources in the Guangdong Province are richly endowed. Its trees are fast growing and the pulp is suitable for papermaking. After China enters the WTO, it will be easier for wood pulp papermaking industry to attract foreign investment.

The combination of tree cultivation and papermaking will accelerate the development of forest as a base for industrial raw materials in the Guangdong Province. In the future, wood pulp papermaking industry will become a major import-substituting industry and one of the backbone industries in the province. Zhanjiang has already been selected for establishing a papermaking factory. Guangdong will create the favorable conditions to accelerate the development.

While the plywood industry in general may have to face more challenges, the bamboo plywood industry will have a good opportunity for development. The abundant resources of bamboo in the Guangdong Province will create a good base for developing the bamboo plywood industry. China's entry into the WTO is the right time for the bamboo plywood to compete in the international market.

- C. Help adjust the industrial structure of Guangdong's forestry and restructure the industries for the export of forest products. In the Guangdong Province, the final goal of adjusting the industrial structure of Guangdong's forestry is to turn low-efficient forestry into high-efficient forestry. The objective is to increase the resources and the profit. China's entry into the WTO will win a place for China in the globalization of economy. Guangdong will attach great importance to increasing the resources and the profits. It will restructure the plywood industry according to the market economy.

In the future, Guangdong will focus on the development of those forest industries such as the forest chemical industry, furniture, wood pulp papermaking, that have comparative advantages. As for the restructuring of industries, Guangdong will focus on the integration of forest and engineering, tree cultivation and papermaking, and forest chemicals. Guangdong will encourage the enterprises strengthen their market competition, find new combination of advantages, survive

and develop in the process of market competition.

- D. Help expand the opening up of Guangdong's forestry. When Guangdong started the second phase of forestry development in Guangdong, the biggest difficulty it faced was the lack of fund. After China enters the WTO, along with the gradual refinement of government policies and regulations and the optimization of the investment environment, more foreign capital, technology and managerial expertise will be attracted to the forest industry in the Guangdong Province. The modernization process of Guangdong's forestry will be accelerated. At the same time, because of the improvement of the environment for international trade, Guangdong's forestry will maximize its advantages, participate in the competition more extensively, and face the challenge of forestry globalization more confidently.

III. After China enters the WTO, the 21st century strategic choice for Guangdong's forestry is to develop export-oriented forestry to earn foreign exchange.

In the 21st century, Guangdong's forestry will have two functions: to accelerate the development of national economy and to support the sustainable development in the Guangdong Province. These functions dictate that Guangdong will contribute to the optimization of the ecological environment and to ensuring sustainable development in the Guangdong Province. It will establish 3.4 million hectares of "Ecological and Public Forest," focus on developing export-oriented forestry to earn foreign exchange, and implement an import-substituting strategy of using locally produced wood pulp, paper and cardboard and synthetic board to replace imported products, and an export-oriented strategy of strengthening the export of rosin, furniture, bamboo and wooden products, and other forest by-products.

Guangdong will take advantage of its location to attract more foreign investments to develop export-oriented forestry bases and forest industries to increase earning of foreign exchange. It will take advantage of its climate to develop raw material forest bases for the wood pulp papermaking and synthetic board industries. These two strategies will help accelerate the development of products such as furniture, rosin, bamboo and wooden products and forest by-products that have international competitiveness. The import-substituting strategy will help to maximize the advantages of a vast and cheap labor force and available raw materials. Through the export-oriented strategy, Guangdong will explore and utilize the forestry resources in the mountain areas, promote the development of the local economy and improvement of the people's living standards, and accelerate the process of modernization in the Guangdong Province.

IV. The measures for implementing the strategy of developing export-oriented forestry

- A. Rely on science and technology, adjust the industrial structure of forestry and raise Guangdong's competitiveness internationally.

Following the import-substituting and export-oriented strategies, Guangdong will rely on forestry sciences and technology and will adjust the managerial and industrial structure of a commercial forest to create the comparative advantages and raise the competitiveness of its products.

1. Promote science and technology and implement the strategy of “Prosper the Forest by Advanced Science and Technology.”

The quality and the productivity of the forest in the Guangdong Province are low. The forestry enterprises are ill-equipped and backward, and their scientific and technological research is outdated. Guangdong will increase its investment in the technology of forestry and make it a production power. The promotion of science and technology will be focused on the nurture of forest resources. Guangdong will research on the reproduction of good species and biotechnology, the structure and distribution of forest species, and the study and promotion of fast-growing and high-yield species. It will speed up the process of introduction, assimilation and localization of the technologies and equipment for synthetic board and forest chemical downstream products. Guangdong will import the state of the art foreign technologies and equipment and will adapt them for local use. It will avoid repeated imports and become independent of foreign equipment.

Guangdong will establish an integrated system of research and development, production, application and marketing. It will combine education, research, and promotion with production to accelerate the advancement of technology.

Guangdong will train a batch of highly qualified professionals for scientific and technological research. Currently, its urgent needs are the training of WTO specialists who are familiar with the socio-economic conditions of China, fluent in foreign languages, with mastery of the forestry industry and global economy. These specialists will apply their knowledge of the WTO rules and common multi-national business practices to protect the development of Guangdong's forestry and to safeguard the economic rights and benefits of Chinese forestry.

2. Speed up the building of the export-oriented forest bases consisting mainly of fast growing and high-yield trees.

Guangdong's forestry is weak in international competition mainly because its low-quality forest stands and the scarcity of forest stock cannot give enough support to the forest industries. Guangdong will need to divide the 5.3 million hectares of commercial forest into 8 forestry bases: the base of raw materials for wood pulp papermaking and wood chip exporting, the base of industrial forest for synthetic board, the base of the raw material for high-quality forest chemicals, the base of rare species of forest, the base of famous, high-quality and rare economic fruit forest, the base of forest by-products, the base of high-quality bamboo forest, and the base of flower exporting.

The target of this adjustment is to establish productive and efficient industrial wood supplying bases to provide high yielding, high-quality and inexpensive raw materials to forest industries and to lay the foundation for raising the competitiveness of forest products. Guangdong will adopt different operating methods according to different operating purposes. Production, operation, exploitation, transportation, processing and export will be carried out in accordance with the market economy. Foreign and domestic capital will be attracted through different channels to include the guideline that those who invest will gain the profits. The enterprises will operate independently and assume sole responsibility for profits and losses. The role of the

government will be focused on guiding and supporting the enterprises, giving appropriate subsidies such as tax reduction to lessen the cost of operation and to increase the returns for establishing export bases.

3. Adjust the industrial structure of forestry.

The main purpose of adjusting the industrial structure of forestry is to form a large-scale, unique, profitable and technically competent industrial structure according to the strategy of developing forestry for earning foreign exchange. The basic goal is to achieve an economy of scale.

Guangdong will encourage industries with solid foundation to increase their capital investment and expansion, and smaller enterprises to merge to expand their production scale. Through policy guidance, Guangdong will push the smaller enterprises into the world market. As a result, some of them will be eliminated in the competition and others will gain opportunities for further development. Restructuring, mergers and alliances will enlarge the scale of the forestry industry.

Guangdong will import directly the advanced technologies and equipment to increase the technological value of its forestry products. It will develop the policies for forestry enterprises and the plans for adjusting industrial structure. It will also set up a fund for adjusting industrial structure to ensure that the adjustment will be carried out efficiently.

B. Speed up the implementation of the import-substituting strategy by using wood pulp to make paper and integrating tree cultivation with the papermaking industry in the Guangdong Province.

The wood pulp papermaking industry will take the lead for the establishment of wood pulp forest base in the development of Guangdong's forestry. Paper pulp is a unique product in the Guangdong Province. As a substitute of imported products of the same kind, it is easier to gain an edge in international market competition for several main reasons. Firstly, the demand for paper is huge in China. The national consumption of paper pulp in the 90's was 20.1% more than that in the 80's. In the Guangdong Province, the import volume of paper and paper pulp in 1998 increased 2.3% than that in 1997. The demand continues to increase rapidly.

Secondly, China has a large paper market and has great potential in developing import substitution. At present, the per capita paper consumption in developed countries is 344.5 kg per year. In China, it is only 13.7kg, even though the country is spending a lot of foreign exchange to import paper pulp and paper every year. In the Guangdong Province, 4.1 million tons of paper pulp and paper were imported in 1997 at a cost of US\$1.9 billion. In 1998, 4.2 million tons were imported at a cost of U.S.\$2.0 billion. Experts predict that the national consumption in 2010 will reach 70-80 million tons.

Thirdly, under the favorable climate condition in the Guangdong Province, trees grow very fast and the production cycle is short. The forest can be cut every 5 or 6 years. The quantity of lumber is 3-5 CBM per mu (1 mu=0.0667 hectare). Guangdong has great potential for fast-growing and high-yield trees for papermaking.

Fourthly, the socio-economic conditions in the Guangdong Province are good for establishing

wood pulp papermaking factories and realizing the integration of tree cultivation and papermaking. The Guangdong Province is close to Hong Kong and Macao and has a relatively advance market economy. It also has a long coastline, making it possible to build factories along the coast to treat industrial pollution.

Fifthly, this strategy will stimulate the economy in the mountain areas and help peasants there to move from poverty to a better life. A factory with an annual turnover of 600,000 tons of paper pulp will generate RMB300 million taxes. Through the cooperation of industry and local residents, the economic benefits will be accrued to the mountain areas and the peasants.

To maximize the advantages of the Guangdong Province, the integration of tree cultivation and papermaking will be the main development of Guangdong's forestry and one of its potential backbone industries. Guangdong will set aside 1.67 million or more hectares of forest base for growing fast-growing and high-yield trees such as mason pines, eucalyptus, and jequirity to ensure sufficient supply of raw materials for the papermaking factories. It will set up four paper pulp factories with an annual turnover of 600,000 tons of paper each in Zhanjiang, Jiangmen, Huizhou and Shanwei. The cost for establishing a 267,000 hectare of raw material forest base and a paper pulp factory with 600,000 tons of annual turnover is RMB10 billion.

Among the four planned paper pulp factories, the Guangdong Government will invest in the one in Zhangjiang. The other three in Jiangmen, Huizhou and Shanwei will be available for foreign investment. China's entry into the WTO will attract foreign investors to invest in the raw material forest bases and the factories.

C. Develop the export of wooden and bamboo products, furniture and other forest by-products to earn more foreign exchange.

In recent years, Guangdong imported a lot of wood to meet the demands in the Guangdong market. It also promoted the export of bamboo and wooden products, furniture and other forest by-products and earned a substantial amount of foreign exchange. In 1995, the export of bamboo and wooden products and furniture amounted to US\$1.0 billion. In 1998, the export had rapidly increased to US\$1.9 billion. In the first half of 1999, the export of furniture exceeded US\$2 billion. These products were mostly exported to the United States, Europe and Southeast Asia. Thus, China's entry into the WTO will be more beneficial to the export of bamboo and wooden products, furniture, and other forest by-products. Guangdong will create a good environment for developing of export-oriented products.

Exporting will be an important way to increase the output value of the mountain regions, to speed up the move from poverty to a better living standard, and to realize the healthy cycle of forest resources. Each city will make full use of its special advantages, select good tree species for local cultivation and build the export base of forest by-products.

Except for bases producing high-quality Guangdong fruit, tea and herb, the Province will focus on developing the export bases of bamboo, edible mushroom and mountain potherb. Currently, about 90,000 tons of bamboo in China is exported abroad, and over US\$20 million is earned at US\$230 per ton. The annual output value of bamboo by-products is over US\$5.5 billion and

US\$500 million is earned annually. If Guangdong restructures the current bamboo forest and develop it in the areas with appropriate growing conditions, it can form a sizable base of export raw materials with a potential annual output exceeding RMB1 billion and an annual earning exceeding US\$50 million. Guangdong will adopt proper measures to match local conditions and set up the export bases of edible mushroom and other natural and health food products.

D. Develop the export-oriented strategy focused on forest chemical products.

Forest chemical industry is important for the comprehensive utilization of forest resources. It increases the economic benefits of forest and shows the relative modernization of the forest industry. Rosin has been one of the main forest products for export in the Guangdong Province. The annual export volume is about 60,000 tons, accounting for 1/3 of the total volume in China. However, because the forest chemical industry in the Guangdong Province is devoid of a high-quality and high-yield forest base of the raw materials for rosin, the production cannot be guaranteed or increased. Moreover, the production enterprises are mostly small in scale, backward in technology and lack of down stream-processing products. Most of the exported commodities are raw materials and primary products with limited economic returns. In addition, the market system is incomplete and product circulation is a rugged process. The market is fragmented, scattered and short of information. These conditions are keeping the forest chemical products in the Guangdong Province from competing in the world market.

China's entry into the WTO will create the opportunities for the forest chemical products in the Guangdong Province to compete effectively in the world market. To achieve this goal, Guangdong will build a 200,000 hectare of stable and high-yield forest base to provide raw materials for turpentine. With that, the annual output of rosin will increase from 100,000 tons at present to over 600,000 tons. If the export ratio will be as it is today, i.e., 50%, the annual export volume of rosin will be 300,000 tons and the earned foreign exchange will exceed US\$300 million.

Guangdong will also develop group enterprises of rosin and forest chemical products through merging the small-scale forest chemical enterprises with the large-scale ones. It will adopt advanced technology to develop down-stream rosin processing products, form famous brands of rosin products and maximize the effects of famous brands, and realize the integration of production, supply, and marketing; the integration of science, technology, and trade; and the integration of domestic and international trade. It will set up trade centers of forest chemical products as a window of international trade, design a series of products according to the export-oriented policy, and turn the resource advantage into an economic advantage.

E. Develop International forest tourism.

Today, forest tourism has become a trend of international tourism. Unique forest tourism has attracted a lot of tourists in the world. Every year 300 million people go sightseeing in the forests in the United States and 800 million people visited the forest park in Japan. Experts predicted that by the end of 2000, 1 billion tourists in the world would have traveled abroad and half of them would have walked in forests. Obviously, international forest tourism will be a rising industry in the 21st century. If the 72-hour visa exemption program is implemented in

Guangdong, Hong Kong and Macao, forest tourism in the Pearl River Delta area will become more popular. Guangdong will adopt the following new measures to develop forest tourism.

1. Set up new rules to welcome international forest tourism in the 21st Century. The basic principle is to balance the relationship between protection and reasonable utilization of forest resources, and the relationship between the establishment of an ecological and public forest and the development of forest tourism. Guangdong will refrain from establishing a single-purpose ecological and public forest. In the Pearl River Delta area, it will integrate the establishment of an ecological and public forest with the development of forest tourism, taking the latter as a new starting point for economic growth. It will prepare for the implementation of the 72-hour visa exemption program. It will utilize the mountains, rivers, birds, beasts, insects, fish and other tourist resources in the mountain areas effectively and invest in constructing basic tourist facilities.
 2. Strengthen the scientific management of international forest tourism. Scientific management will include the management of forest resources, tourism facilities, tourist market, the sales of tourism commodities and the perfection of tourist services. Specialized organizations will be set up to monitor and to execute the multi-faceted forest tourism management.
 3. Increase tourist facilities. Currently, the tourist parks in the Guangdong Province are poorly constructed, lacking uniqueness, and providing poor services. They do not have a complete service system. In the future, Guangdong will build unique tourist spots and set up a complete service system of sightseeing, food services, accommodation, entertainment and shopping.
 4. Set up one package service of forest tourism. Guangdong will maximize the intermediary role of the travel agencies, establish alliance with international travel agencies, integrate city tours with international forest tours, form a common tourist market and share the profit.
 5. Strengthen the construction of the service team for forest tourism. Guangdong will recruit more talented personnel, reinforce their professional training, improve the quality of the employees to raise the quality of service and management to meet or exceed the international standard.
- F. The Government will strengthen its protection and support of forestry.

Forestry is a weak industry. Guangdong will ensure a consistent, healthy and stable development of the industrial economy of Guangdong's forestry. To achieve this goal, Guangdong will use tariff and non-tariff measures, including emergency import protection and anti-dumping of goods, to protect the industry, according to the relevant terms in the WTO.

In international market competition, Guangdong will give subsidies to wood products according to international practices. It will also enhance competitiveness through adjusting government policies on forestry and the macro economy, as follows:

1. Increase the basic investments and provide the necessary research and technology consulting services.
 2. Adjust the taxation on forestry and cancel the unreasonable double taxation on unique agricultural products.
 3. Reinforce the adjustment of macro financial policy. Reduce the tax pressure on agricultural products in the mountain areas. Reduce various fees charged for lumbers.
 4. Give appropriate price compensation to lumber producers. Regardless of its use, a living forest has the function of balancing the ecology. Currently 3.4 million hectares of forest in Guangdong has been significantly delimited as the “Ecological and Public Forest.” Because of the unique nature of forestry, it is a common worldwide practice for governments to encourage lumber production and to provide subsidies to the “Ecological and Public Forest.” Thus, Guangdong will review and adjust the policies on forestry and provide price compensation to lumber producers according to international practices.
- G. Set up the Guangdong Forestry Association to coordinate the actions taken by different enterprises.

After the Government changes its control of the enterprises, Guangdong will set up the Guangdong Forestry Association to enhance the competitiveness of the enterprises and to defend against external competition. The association will help the enterprises find an effective way of mutual protection on the basis of common interest. It will be a voluntary organization uniting related enterprises on the basis of adherence to a set of rules. Its main tasks are to provide information to the enterprises, to provide consulting services, to import and disseminate advanced technology and managerial expertise, to organize technical training, to study the technical standards of the forest industry, to make macro plans, to mediate and arbitrate the disputes among its members, and to protect its members’ interests against infractions.

H. Redouble Guangdong’s efforts to attract foreign investment and expand the size of foreign investment in actual use.

Since China’s economic reform and opening up to the outside world, Guangdong’s forestry has achieved marked success in attracting foreign investments. It has attracted at least 96 foreign invested projects with a contracted investment value of US\$927 million and a utilized investment value of US\$144 million. Attracting foreign investment in forestry not only provides a developing fund for forestry, but also imports many advanced operational and managerial expertise and advanced science and technologies. It expands the export trade of forest products and trains a number of competent professionals of international trade in forestry. It plays an important role in the development of Guangdong’s forestry, the adjustment of its industrial structure, and the promotion of economic development in the mountain areas.

The scope of foreign investment in forestry is small compared with other industries in the Guangdong Province. The channel and areas for attracting foreign investment are limited and the

industry's capacity for assuming international financial risk is low. The financial crisis in Southeast Asia had affected the utilization of foreign investment in forestry unevenly, and the rate of introduction and utilization of foreign investment had slackened. It is not enough nor possible to rely solely on government investments to hasten the development of forestry and to enhance its social, ecological and economic benefits. To solve the problem of insufficient funding for forestry development, Guangdong will seize the opportunity of China's entry into the WTO, to consider other options, expand the opening up, redouble the efforts on attracting foreign investment and expand the size of foreign investment in the following ways.

1. Further improve the investment environment. Guangdong will improve both the hard aspects and the soft aspects of the investment environment. It will further carry out "*The Managerial Methods for Foreign Investment on Forestry in the Guangdong Province (Order No. 22 of the Guangdong Provincial Government)*" and "*Notice on Transmitting 'The Managerial Methods for Foreign Investment on Forestry in the Guangdong Province.'*" Through a reduction and exemption of taxes, Guangdong will provide favorable terms for forest allocation, examination and approval, effective period of usage, reduction of fees, tree cutting, etc. It will simplify its operating procedures and increase efficiency. It will resolve major problems related to manufacturing and operation confronted by foreign investors. It will strengthen coordination and accelerate in building a unified, open and orderly environment for marketing and investment.
2. Design a batch of major projects to attract foreign investments. The emphasis of Guangdong's forestry is to attract foreign investment in tree cultivation and papermaking industry including afforestation and wood pulp papermaking projects. Guangdong will focus on piloting the development of an integrated tree cultivation and papermaking project to model for the other similar projects. It will also try to attract foreign investment in building bases of wood chips, forest products, forest specialty and byproducts and forest chemical products, and the building of other down-stream processing projects to increase the added value and technical content of forest products and economic benefits. Guangdong will attract foreign capital to invest in the tertiary industries such as forest tourism to expedite the development of new industries. It will hold investment seminars on these key projects.
3. Implement multi-source attraction of foreign investment and focus on attracting investment from multi-national companies. Guangdong will carry out a strategy of diversified utilization of foreign investment and attract foreign investment from different sources. Guangdong will organize investor's seminar in Hong Kong and overseas on the key projects to ensure achieving the desired effects.
4. Further expand the opportunities for contracting overseas projects and overseas labor co-operation. Guangdong will utilize the capability of the Guangdong Forestry Institute to contract for overseas projects and to start a program of overseas labor cooperation. Guangdong will expand contracting for overseas projects, offering an integrated service package in project design, construction and labor. It will contract for a number of large-scale and high-grade projects to gain world recognition.

5. Actively develop overseas investment, utilize overseas forest resources, develop wood processing projects and lead in the export of equipment and labor. Guangdong will encourage the enterprises to actively participate in project planning and selection, seize the opportunity to utilize overseas forest resources, initiate new wood processing projects, expand export, and accelerate the adjustment of the economic structure.